Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet of

	Complete if Known	
Application Number	10/775,048	Ø
Filing Date	February 9, 2004	
First Named Inventor	Richard L. Giroux, et al.	
Art Unit	3672	
Examiner Name	Unknown	
Attorney Docket Number	WEAT/0359.P1	

	U.S. PATENT DOCUMENTS							
Examiner Initials *	Cite No.	Document Number  Number - Kind Code <sup>®</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant			
7HD7		US-6,857,487	02-22-2005	Galloway	Figures Appear			
1	1	US- 6,857,486	02-22-2005	Chitwood, et al.				
		US- 6,854,533	02-15-2005	Galloway				
		US- 6,848,517	02-01-2005	Wardley				
		US-6,840,322	01-11-2005	Haynes				
		US-6,752,211	06-22-2004	Dewey, et al.				
		US-6,745,834	06-08-2004	Davis, et al.				
		US-6,725,924	04-27-2004	Davidson, et al.				
		US-6,708,769	03-23-2004	Haugen, et al.				
		US-6,668,684	12-30-2003	Aflen, et al.				
		US-6,666,274	12-23-2003	Hughes				
		US-6,655,460	12-02-2003	Bailey, et al.				
		US-6,651,737	11-25-2003	Boutigny				
		US-6,585,040	07-01-2003	Hanton, et al.				
		US-6,536,522	03-25-2003	Birckhead, et al.				
		US-6,464,011	10-15-2002	Tubel				
	_	US-6,458,471	10-01-2002	Lovato, et al.				
$\Delta L$		US-6,433,241	09-03-2002	Juhasz, et al.				
W		US-6,378,633	04-30-2002	Moore				
/HD/_ <b>i</b>		US- 6,371,203	04-16-2002	Frank, et al.				

FOREIGN PATENT DOCUMENTS						
Evenines	Cite	Foreign Patent Document		Name of Petentee or	Pages, Columns, Lines,	
Examiner Cite Initials* No.1		Country Code <sup>2</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if knawn)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
_/HD/		EP 0479583	04-08-1992	Gonalez, et al.		
		EP 1148206	10-24-2001	Scott, et al.		
		GB 2381809	05-14-2003	Ohmer		
		GB 2347445	09-06-2000	Metcalfe, et al.		
		WO 99/24689	05-20-1999	Collins		
		WO 99/04135	01-28-1999	Collins		
		WO 97/05360	02-13-1997	Collins		
V		WO 03/074836	09-12-2003	Philip		
/HD/			· · · · · · ·	,,		

Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Trainstation is affactived.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commence, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 2

	Complete if Known	
Application Number	10/775,048	
Fiting Date	February 9, 2004	
First Named Inventor	Richard L. Giroux	
Art Unit	3672	
Examiner Name	Unknown	
Attorney Docket Number	WEAT/0359.P1	

	U.S. PATENT DOCUMENTS							
Examiner Cile		Document Number	Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevan			
Initials *	No.	Number - Kind Code <sup>a</sup> (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear			
/HD/		US-6,237,684	05-29-2001	Boutigny, Jr., et al.				
		US- 6,217,258	04-17-2001	Yamamoto, et al.				
		US- 6,012,529	01-11-2000	Mikolajczyk, et al.				
		US- 5,878,815	03-09-1999	Collins				
		US- 5,348,095	09-20-1994	Worrall, et al.				
		US- 5,069,297	12-03-1991	Krueger				
		US- 4,962,819	10-16-1990	Bailey, et al.				
		US- 3,760,894	09-25-1973	Pitifer				
		US- 2,978,047	04-04-1961	DeVaan				
		US- 2005-0000691	01-06-2005	Giroux, et al.				
		US- 2004-0262013	12-30-2004	Tilton, et al.				
		US- 2004-0251055	12-16-2004	Shahin, et al.				
		US- 2004-0251050	12-16-2004	Shahin, et al.				
		US- 2004-0251026	12-16-2004	Giroux, et al.				
		US- 2004-0245020	12-09-2004	Giroux, et al.				
		US- 2004-0244992	12-09-2004	Carter, et al.				
		US- 2004-0226751	11-18-2004	McKay, et al.				
		US- 2004-0221997	11-11-2004	Giroux, et al.				
$\Delta Z$		US- 2004-0216924	11-04-2004	Pietras, et al.				
V	_	US- 2004-0216892	11-04-2004	Giroux, et al.				
/HD/		US-2004-0016575	01-29-2004	Shahin, et al.				

	FOREIGN PATENT DOCUMENTS					
Examiner Cite	Cite	Foreign Patent Document	Dublication	Name of Patentee or	Pages, Columns, Lines,	
Initials* No.1		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>6</sup> ( <i>ii Imawn</i> )	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
				-		

Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007

"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Nich document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Transtation is attached.

Translation is attached.

This collection is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35.U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1996, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitut	Substitute for form 1449A/PTO			Complete if Known				
				Application Number	10/775,048			
INFORMATION DISCLOSURE				Filing Date	February 9, 2004			
STA	STATEMENT BY APPLICANT			First Named Inventor	Richard L. Giroux			
				Art Unit	3672			
(Use as many sheets as necessary)		Examiner Name	Hoang C. Dang					
Sheet	1	of	1	Attorney Docket Number	WEAT/0359.P1			

			U.S. PATENT D	OCUMENTS	
Examiner Cite Initials * No.*		Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan
tnitlals *	No.1	Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY		Pages, Columns, Lines, Where Relevar Passages or Relevant Figures Appear
/HD/		US- 2005/0183892	08-25-2005	Oldham et al.	
<del></del>					
		**			
-					
					·
					·····
					,
	-			<u> </u>	•

	FOREIGN PATENT DOCUMENTS						
Examiner	Cite	Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines,		
Initials*	No.1	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	78	
			·				
	•						

		<del></del>	
Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinda Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The Information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, Including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. JUN 2 6 7006

Substitute of form 144

Sheet

PTO/SB/08a (07-05) Approved for use through 07/31/2006, OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## **INFORMATION DISCLOSURE** STATEMENT BY APPLICANT

Complete if Known Application Number 10/775.048 Filing Date February 9, 2004 First Named Inventor Richard L. Giroux, et al. Art Unit 3672 Examiner Name Hoang C. Dang

(Use as many sheets as necessary)

of 2

WEAT/0359.P1 Attorney Docket Number

			U.S. PATENT	DOCUMENTS	
Examiner Cite		Document Number	Publication Date	Name of Patentee or Applicant of	Pages Columns Lines Where Relevant
initials *	Cite No.1	Number - Kind Code <sup>2</sup> (# knawn)	MM-DD-YYYY	Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-	_		
		US-			-
		US-			
		US-			•••

	FOREIGN PATENT DOCUMENTS							
Examiner	Cite	Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines,			
Initials* No.1		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>6</sup> (If known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>		
_/HD/	B1	GB 2,396,375	06/23/2004	Galloway, et al.				
	<u> </u>							
				<del></del>				
			· · · · · · · · · · · · · · · · · · ·	<u> </u>	<del></del>			

Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*Applicant's unique citation designation number (optional). \*See Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. \*Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \*For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \*Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. \*Applicant is to place a check mark here if English language

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Petent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08a (07-05)

Approved for use through 07/31/2008. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitut	e for form 1449A	/PTO		Complete if Known			
				Application Number	10/775,048		
INFO	PRMATIC	on dis	CLOSURE	Filing Date	February 9, 2006		
STA	STATEMENT BY APPLICANT			First Named Inventor	Richard L. Giroux		
				Art Unit	3672		
	(Use as many	sheets as	necessary)	Examiner Name	Hoang C. Dang		
Sheet	2	of	2	Attorney Docket Number	WEAT/0359.P1		

		NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2	
/HD/	C1	GB Examination Report, Application Number 0516281.3, Dated May 2, 2006		
• • •				
		·	<del>                                     </del>	
·····				
•				
			<del>                                     </del>	
-				

( = 0 · · · · · · · · · · · · · · · · · ·	Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007
---	-----------------------	---------------------------	--------------------	------------

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE of Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO Complete if Known 10/775,048 Application Number INFORMATION DISCLOSURE February 9, 2004 Filing Date STATEMENT BY APPLICANT Richard L. Giroux First Named Inventor Art Unit 3672 (Use as many sheets as necessary) Hoang C. Dang Examiner Name Sheet 1 of 5 WEAT/0359.P1 Attorney Docket Number

			U.S. PATENT		
Examiner Cite No.1		Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevar
Initials No.	Number - Kind Code <sup>2</sup> (if known)	MAPODITITI		Figures Appear	
/HD/	A1	US-7,128,154	10-31-2008	Giroux, et al.	
1	A2	US-7,117,957	10-10-2006	Metcalfe, et al.	
	A3	US-7,108,084	09-19-2006	Vail, III	
	A4	US- 7,108,083	09-19-2006	Simonds, et al.	
	A5	US-7,108,072	09-19-2008	Cook, et al.	
	A6	US-7,100,713	09-05-2006	Tulloch	
	A7	US-7,100,710	09-05-2008	Vail, III	
	A8	US- 7,096,982	08-29-2008	McKay, et al.	
	A9	US- 7,093,675	08-22-2006	Pia	
	A10	US- 7,090,004	08-15-2006	Warren, et al.	
	A11	US- 7,048,050	05-23-2006	Vail, III, et al.	
	A12	US- 7,040,420	05-09-2006	Vail, III	
	A13	US- 7,036,610	05-02-2006	Vail, III	
	A14	US- 7,013,997	03-21-2006	Vail, III	
	A15	US- 7,004,264	02-28-2006	Simpson, et al.	
	A16	US- 6,953,096	10-11-2005	Gledhill, et al.	
	A17	US- 6,941,652	09-13-2005	Echols, et al.	
	A18	US- 6,926,126	08-09-2005	Baumann, et al.	
	A19	US- 6,923,255	08-02-2005	Lee	
	A20	US- 6,920,932	07-26-2005	Zimmerman	
	A21	US-6,857,487	02-22-2005	Galloway, et al.	
	A22	US- 6,802,374	10-12-2004	Edgar, et al.	
	A23	US-6,749,026	06-15-2004	Smith, et al.	
	A24	US- 6,742,591	06-01-2004	Metcalfe	
	A25	US- 6,732,822	05-11-2004	Slack, et al.	
	A26	US- 6,725,917	04-27-2004	Metcalfe	
	A27	US- 6,702,029	03-09-2004	Metcalfe, et al.	
	A28	US-6,578,630	06-17-2003	Simpson, et al.	
	A29	US-6,571,868	06-03-2003	Victor	
1/	A30	US-6,527,049	03-04-2003	Metcalfe, et al.	
lacksquare	A31	US- 6,446,323	09-10-2002	Metcalfe, et al.	
/HD/	A32	US- 6,425,444	07-30-2002	Metcalfe, et al.	

Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007
-----------------------	---------------------------	--------------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*Applicant's unique citation designation number (optional). \*See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. \*Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \*For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \*Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. \*Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

DEC 01 2006

Approved for use through 07/31/2006. OMB 0851-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Substitute for form 1449A/PTO Complete if Known 10/775.048 Application Number INFORMATION DISCLOSURE Filing Date February 9, 2004 STATEMENT BY APPLICANT First Named Inventor Richard L. Giroux Art Unit 3672 (Use as many sheets as necessary) Hoang C. Dang Examiner Name Sheet of 5 Attorney Docket Number WEAT/0359.P1

U.S. PATENT DOCUMENTS							
		Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant		
		Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear		
/HD/	A33	US- 6,224,112	05-01-2001	Eriksen, et al.			
ı	A34	US- 6,085,838	07-11-2000	Vercaemer, et al.			
	A35	US- 6,029,748	02-29-2000	Forsyth, et al.			
	A36	US- 6,021,850	02-08-2000	Wood, et al.			
	A37	US- 5,901,787	05-11-1999	Boyle			
	A38	US-5,791,416	08-11-1998	White, et al.			
	A39	US- 5,718,288	02-17-1998	Bertet, et al.			
	A40	US- 5,685,369	11-11-1997	Ellis, et al.			
	A41	US- 5,560,426	10-01-1996	Trahan, et al.			
	A42	U\$- 5,409,059	04-25-1995	McHardy			
	A43	US- 5,303,772	04-19-1994	George, et al.			
	A44	US- 5,083,608	01-28-1992	Abdrakhmanov, et al.			
	A45	US- 5,024,273	06-18-1991	Coone, et al.			
	A46	US- 4,858,705	08-22-1989	Thiery			
	A47	US- 4,697,640	10-06-1987	Szarka			
	A48	US- 4,588,030	05-13-1986	Blizzard			
	A49	US- 4,531,581	07-30-1985	Pringle, et al.			
	A50	US- 4,469,174	09-04-1984	Freeman			
	A51	US- 4,429,620	02-07-1984	Burkhardt, et al.			
	A52	US- 4,324,407	04-13-1982	Upham, et al.			
	A53	US-4,319,393	03-16-1982	Pogonowski			
	A54	US- 4,288,082	09-08-1981	Setterberg, Jr.			
Ī	A55	US- 4,159,564	07-03-1979	Cooper, Jr.			
1	A56	US- 4,127,168	11-28-1978	Hanson, et al.			
	A57	US- 4,069,573	01-24-1978	Rogers, Jr., et al.			
T-	A58	US- 3,948,321	04-06-1976	Owen, et al.			
	A59	US- 3,911,707	10-14-1975	Minakov, et al.			
	A60	US- 3,818,734	08-25-1974	Bateman			
<u> </u>	A61	US- 3,776,307	12-04-1973	Young			
1/	A62	US- 3,712,376	01-23-1973	Owen, et al.			
W	A63	US- 3,467,180	09-16-1969	Pensotti			
/HD/	A64	US- 3,195,646	07-20-1965	Brown			

			T
Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007

"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant, 'Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449A/PTO Complete if Known 10/775,048 Application Number INFORMATION DISCLOSURE Filing Date February 9, 2004 STATEMENT BY APPLICANT First Named Inventor Richard L. Giroux Art Unit 3672 (Use as many sheets as necessary) Examiner Name Hoang C. Dang Sheet WEAT/0359.P1 of | 5 Attorney Docket Number

			U.S. PATENT	DOCUMENTS	
Examiner Cite Initials No.		Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Releva
	Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY		Passages or Relevant Figures Appear	
/HD/ A65		US- 3,087,546	04-30-1963	Woolley	
	A66	US- 2,898,971	08-11-1959	Hempel	
	A67	US- 2,383,214	08-21-1945	Prout	
	A68	US- 2,345,308	03-28-1944	Wallace	
	A69	US- 2,344,120	03-14-1944	Baker	
	A70	US- 2,216,226	10-01-1940	Bumpous	
	A71	US- 2,214,226	09-10-1940	English	
	A72	US- 1,930,825	10-17-1933	Raymond	
	A73	US- 1,597,212	08-24-1926	Spengler	
	A74	US- 1,569,729	01-12-1926	Duda	
	A75	US- 1,561,418	11-10-1925	Duda	
	A76	US- 1,545,039	07-07-1925	Deavers	
	A77	US- 1,459,990	06-26-1923	Reed	
	A78	US- 1,324,303	12-09-1919	Camichael	
	A79	US- 761,518	05-31-1904	Lykken	
	A80	US- 2004/0112693	06-17-2004	Baumann, et al.	
	A81	US- 2004/0060700	04-01-2004	Vert, et al.	
	A82	US- 2002/0166668	11-14-2002	Metcalfe, et al.	
	A83	US- 2002/0145281	10-10-2002	Metcalfe, et al.	
	A84	US- 2001/0045284	11-29-2001	Simpson, et al.	
	A85	US- 2001/0040054	11-15-2001	Haugen, et al.	
	A86	US-2001/0000101	04-05-2001	Lovato, et al.	
	A87	US-			
	A88	US-			
	A89	US-			
1/	A90	US-			
lacksquare	A91	US-			
7HD/	A92	US-			

	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 801.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Trainstation is arached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO			•	Complete if Known		
		Application Number	10/775,048			
INFORMATION DISCLOSURE			CLOSURE	Filing Date	February 9, 2004	
STA	TEMEN	T BY A	PPLICANT	First Named Inventor	Richard L. Giroux	
				Art Unit	3672	
(Use as many sheets as necessary)		Examiner Name	Hoang C. Dang	•		
Sheet	4	of	5	Attorney Docket Number	WEAT/0359.P1	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>6</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	τ⁰	
7HD/	B1	EP 0 397 323	11-14-1990	Cherrington			
I	B2	GB 2 326 896	01-06-1999	Montaron			
	В3	GB 2 320 734	07-01-1998	Coronado, et al.			
	B4	GB 2 239 918	07-17-1991	Vanderjagt			
	B5	GB 887,150	01-17-1962	Schramm, et al.			
	86	RU 2079633	05-20-1997	Sultan, et al.			
	B7	WO 02/092956	11-21-2002	Blange			
	B8	WO 02/29199	04-11-2002	Cook, et al .			
	89	WO 01/66901	09-13-2001	Vuyk			
	B10	WO 01/60545	08-23-2001	Cook, et al.			
	B11	WO 00/77431	12-21-2000	Cook, et al.			
	B12	. WO 00/37773	06-29-2000	Metcalfe, et al.			
V	B13	WO 00/37772	06-29-2000	Metcalfe, et al.			
-	B14	WO 99/18328	04-15-1999	Bailey, et al.			
/HD/	B15	WO 82/01211	04-15-1982	Gaines			
	B16						
	B17						
	B18						
	B19	· · · · · · · · · · · · · · · · · · ·					
	B20						
	B21			·			
	B22						
	B23		1				
	B24						
	B25		<u> </u>				
	B26						
	B27		<b>—</b>				

Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007	]
-----------------------	---------------------------	--------------------	------------	---

"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute	e for form 1449.	A/PTO		Complete if Known		
				Application Number	10/775,048	
INFC	PRMATIC	on dis	CLOSURE	Filing Date	February 9, 2004	
STA	TEMEN1	BY A	PPLICANT	First Named Inventor	Richard L. Giroux	
				Art Unit	3672	
	(Use as many sheets as necessary)			Examiner Name	Hoang C. Dang	
Sheet	5	of	5	Attorney Docket Number	WEAT/0359.P1	

NON PATENT LITERATURE DOCUMENTS							
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т2				
/HD/	C1	Multilateral Case History, Onshore-Nigeria, Baker Hughes, 2000					
/HD/	C2	Multilateral Case History, Offshore Norway, Baker Hughes, 1995					
/HD/	сз	TOMMY WARREN, BRUCE HOUTCHENS, AND GARRETT MADELL, Directional Drilling With Casing, SPE/IADC 79914, SPE/IADC Drilling Conference, Amsterdam, The Netherlands, February 19-21, 2003, pages 1-10					
	C4						
	C5						
	C6	·					
	C7						
	C8						
	C9						
	C10						
	C11						
	C12						
	C13						
	C14						

Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449A/PTO Complete if Known 10/775,048 Application Number **ี่ คทั้ง Pormation disclosure** February 9, 2004 Filing Date STATEMENT BY APPLICANT Richard L. Giroux First Named Inventor Art Unit 3672 EB 2 3 2007(Use as many sheets as necessary) Examiner Name Hoang C. Dang WEAT/0359.P1 Attorney Docket Number

U.S. PATENT DOCUMENTS							
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan		
Initials *	Cite No.1	Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Çileşi büdünerik	Passages or Relevant Figures Appear		
7HD7	A1	US- 7,165,634	01/23/2007	Vail, III			
	A2	US- 7,159,668	01/09/2007	Негтега			
	A3	US- 7,147,068	12/12/2006	Vail, III			
	A4	US- 7,143,847	12/05/2006	Pia			
	A5	US- 7,140,455	11/28/2006	Walter, et al.			
	A6	US- 7,140,443	11/28/2006	Beierbach, et al.			
	A7	US- 7,137,454	11/21/2006	Pietras			
Î	A8	US- 7,128,154	10/31/2006	Giroux, et al.			
	A9	US- 7,124,825	10/24/2008	Slack			
	A10	US- 7,108,080	09/19/2006	Tessari, et al.			
	A11	US- 7,082,997	08/01/2006	Slack			
	A12	US- 7,044,241	05/16/2006	Angman			
	A13	US- 7,013,992	03/21/2006	Tessari, et al.			
	A14	US- 6,892,819	05/17/2005	Cook, et al.			
	A15	US- 6,758,278	07/06/2004	Cook, et al.			
1	A16	US- 6,742,584	06/01/2004	Appleton			
1	A17	US- 6,725,919	04/27/2004	Cook, et al.			
	A18	US- 6,705,413	03/16/2004	Tessari			
	A19	US- 6,640,903	11/04/2003	Cook, et al.			
	A20	US- 6,612,383	09/02/2003	Desai, et al.			
	A21	US- 6,591,905	07/15/2003	Coon			
	A22	US- 6,554,063	04/29/2003	Ohmer			
	A23	US- 6,497,289	12/24/2002	Cook, et al.			
	A24	US- 6,401,820	06/11/2002	Kirk, et al.			
	A25	US- 6,311,792	11/06/2001	Scott, et al.			
	A26	US- 6,244,363	06/12/2001	McLeod			
	A27	US- 6,106,200	08/22/2000	Mocivnik, et al.			
	A28	US- 6,085,838	07/11/2000	Vercaemer, et al.			
	A29	US- 6,059,053	05/09/2000	McLeod			
	A30	US- 5,878,815	03/09/1999	Collins			
	A31	US- 5,829,539	11/03/1998	Newton, et al.			
	A32	US- 5,730,221	03/24/1998	Longbottom, et al.			
	A33	US- 5,685,373	11/11/1997	Collins, et al.			
	A34	US- 5,462,120	10/31/1995	Gondouin			
<b>d</b> 7	A35	US- 5,435,386	07/25/1995	LaFleur			
V	A36	US- 5,394,823	03/07/1995	Lenze			
/HD/	A37	US- 5,311,952	05/17/1994	Eddison, et al.			

Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007
	<u> </u>		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitut	e for form 1449A/PT(	0		Complete if Known		
				Application Number	10/775,048	
INFC	RMATION	DIS	CLOSURE	Filing Date	February 9, 2004	
STA	TEMENT B	YA	PPLICANT	First Named Inventor	Richard L. Giroux	
				. Art Unit	3672	
	(Use as many she	eets as	necessary)	Examiner Name	Hoang C. Dang	
Sheet	2	of	2	Attorney Docket Number	WEAT/0359.P1	

U.S. PATENT DOCUMENTS							
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevar		
Initials *	No.5	Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear		
/HD/	A38	US- 5,271,472	12/21/1993	Letumo			
_1_	A39	US- 4,770,259	09/13/1988	Jansson			
	A40	US- 4,708,202	11/24/1987	Sukup, et al.			
	A41	US- 4,182,423	01/08/1980	Ziebarth, et al.			
	A42	US- 3,935,910	02/03/1976	Gaudy, et al.			
	A43	US- 3,656,564	04/18/1972	Brown			
	A44	US- 3,273,660	09/20/1968	Jackson, et al.			
	A45	US- 3,001,585	09/26/1961	Shiplet			
	A46	US- 2,696,367	12/07/1954	Robishaw			
	A47	US- 2005/0077048	04/14/2005	Hall			
$\top$	A48	US- 2005/0011643	01/20/2005	Slack, et al.			
	A49	US- 2004/0182579	09/23/2004	Steele, et al.			
V	A50	US- 2003/0183424	10/02/2003	Tulloch	<del></del>		
/HD/	A51	US- 2003/0042022	03/06/2003	Lauritzen, et al.			
	A52	US-		,	, , , , , , , , , , , , , , , , , , , ,		
	A53	US-					

	FOREIGN PATENT DOCUMENTS							
Examiner	Cite	Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines,			
Initials*	No.1	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (# known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	τ۴		
/HD/	B1	GB 733,596	07/13/1955	Cochran, et al.				
/HD/	B2	WO 00/50730	08/31/2000	Tessari				
	B3							
	B4							
	B5			·				
	B6							
	B7							
	B8							
	<b>B</b> 9							
	B10					_		

Examiner Signature	/Hoang Dang/ (04/15/2007)	Date Considered	04/15/2007

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of Information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.